# PRODUCT:
**ENERJEX 6C4**

# APPLICATION:
Passivation and decontamination of “free iron” of Stainless Steel surfaces in accordance with ASTM A967 1999.

- Stainless Steels
  - 200, 300, 400 Series
  - Duplex family S31803, S32650, S32760, Zeron 100 etc
- Hastalloys family
- Inconels

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## GENERAL:
ENERJEX 6C4 is an acceptable alternative passivation agent to those traditionally used such as Nitric Acid.

- Ecopass 6C4 conforms to ASTM A967 therefore has been approved by ASTM (American Society Testing Mechanical).

The product is made from Citric acid and is therefore not classified as hazardous to personel nor the environment.

ENERJEX 6C4 also contains other ingredients that help with the natural chelating effect of the acid and also surfactants that help “wet” the surface and hold the acid to the surface long enough so the energy of the product can get to work.

This product is used in the final stages of a Pickling operation or as an environmentally friendly alternative Passivation agent.

- Can be used as a spray on product, wip on product or for immersion and circulation methods.
- Can also be used just as a “stand alone” cleaner for general cleaning of stainless steel surfaces and other hard surfaces.

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## CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Composition</th>
<th>Citric acid</th>
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<tbody>
<tr>
<td></td>
<td>Chelating agent</td>
</tr>
<tr>
<td></td>
<td>Wetting agent</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Density</td>
<td>1.0 kg/l</td>
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<tr>
<td>pH</td>
<td>1</td>
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<tr>
<td>Flash point</td>
<td>-</td>
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</tbody>
</table>
HOW TO USE:

1) Apply solution via a spray applicator pump either air driven (see SRV1/4) or a manual hand held type. Ensure entire area is wetted. Can also be applied by brush, immersion or sponged onto the surface.

2) Ensure that the entire area is wetted.

3) The product can be left for a minimum of 30 minutes and longer if desired. If used on polished surfaces as part of a swab clean procedure wipe the product from the surface using rags and then power wash the surface. These times are inaccordance with ASTM A967

4) Thorough washing of the surface is required preferably by clean high pressure water jetting.

Extract from ASTM A380:

Chelate cleaning - Chelates are chemicals that form soluble, complex molecules with certain metal ions, inactivating the ions in solution so they cannot normally react with other elements to produce precipitates or scale. They enhance the solubility of scale and certain other contaminants, do not precipitate different scales when the cleaning solution becomes spent, and can be used on some scales and contaminants that even mineral acids will not attack. When properly used (chelating agents must be continuously circulated and must be maintained within careful controlled temperature limits), intergranular attack, pitting and other harmful effects are minimal. Chelating agents are particularly useful for cleaning installed equipment and systems.

PACKAGING: ENERJEX 6C4 is supplied in 25lt, 200lt and 1000lt containers All containers are UN certified and carry correct labelling.

STORAGE: ECOPASS 6C4 Containers must be kept in an upright position and the caps properly sealed and away from unauthorised persons.

SAFETY FIRST: As always when using chemicals proper protective clothing must be worn; See Safety Data (SDS) sheets.

ENVIRONMENT: This product is not regarded as damaging to the environment and therefore requires no special waste control measures except adjustment of the Ph level to 6 - 10 range Stainless Restoration will give advice FREE of charge concerning the disposal issue.

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